

USDA APHIS

“Q-37 Stakeholder Meeting”

May 25, 2005

Stated Purpose: To gather input from stakeholder groups on the proposed Criteria for Adding propagative plants to an “excluded pending risk evaluation and approval” category to ultimately be included in the proposed Q-37 regulation.

Desired Outcomes:

1. Increased stakeholder awareness of the status of Q-37.
2. A sense of the stakeholders’ concerns and interests in Q-37.
3. Stakeholders’ ideas, opinions and suggestions, captured verbally and electronically on the Criteria for adding propagative plants to an “excluded pending risk evaluation and approval” category to ultimately be included in the proposed Q-37 regulation.

Note: The following document contains raw, unedited data collected by table recorders during the meeting. (Some typographical and spelling errors have been corrected to help readability). Information about the meeting agenda and presentations appears in italics, within boxes before each section, to help the reader understand the context for the discussion. Refer to the [Draft Criteria](#) for more information. The numbers beside the comments refer to the order in which they were submitted.

Table of Contents

TABLE INTRODUCTIONS.....	3
BACKGROUND ON Q-37 – QUESTIONS.....	6
QUESTIONS FOR CLARIFICATION.....	7
FIRST DISCUSSION PERIOD	8
SECOND DISCUSSION PERIOD.....	18
THIRD DISCUSSION PERIOD	25

Table Introductions

What brings you to this meeting?

Stakeholder Themes:

- Protect and promote industry concerns, insure that the industry continues to thrive
- Protecting the environment and preventing pest/pathogens/invasive plant introductions
- Insure the safe passage of product
- Understand the requirements for international movement of plants and plant products
- To gain a better understanding of the Q-37 process
- To develop or create mitigation measures to respond rapidly and detect early

Stakeholder Group Comments:

- 001 representing industry for whom new plant varieties are lifeblood but that needs an effective safeguarding system
- 002 I am here to stop these guys from coming in here
- 003 Significant issue in dealing with introduction of diseases - want to create a system that's effective and allows opportunity for industry to continue to trade
- 004 I here to make sure growers' needs are represented well
- 005 Forest Service plant pathologist - invasives/exotic
Mich Farm Bureau - 45000 family members + nursery growers grass roots policy group , not a scientist, policy level person
Rock Soc. - representing a new Int'l seed exchange / efficacy group for umbrella advocates safe passage of seed
- 006 important industry - must be well protected and able to continue to flourish
- 007 I'm a major importer. Also export to Canada. Concerned about tree & shrub seeds
- 008 lifeblood of industry is new products - bringing in, domesticating, producing and selling - production locations offshore - want to continue, but with necessary safeguards to ensure that pests and invasive plants are not brought in
- 009 Focus on bedding plants - no finished products. here to gain better understanding on how the process works. I have experiences with importing from other countries, good things and bad things.
- 010 ardent amateurs not your average seed swappers
U Concerned Sci - botanist by training, OTA formerly, domestic interests
European commission - mostly a pesticide person, but does food safety 00 originally zoologist00

- 011 I used to work on Q37. Now consult and have an addiction to Q37
- 012 Doug Guriqan-Sherman- Center for Food Safety, Plant Pathologist was at EPA
Judit Monis -STA Labsd Seed diagnostic Co. of CA, interest is Plant Heath -
wants to understand what's happening, plant pathologist, virologist background,
to have input
Richard Gaskalla FL Dept. Ag. Botany, bureaucrat, FL farm bureau, FL industry
Rick Krause- Amer. Farm Bureau, DC policy area, interest is invasive species
side , agric. trade, Nursery members
Caroline Feitel- Foreign Ag. Netherlands Embassy, producers of nursery stock,
what will mean for exports, want to have input, want to be used as an info
source.
- 013 environmental group and consumer group interested in protective matters, but
want to make sure we're not going too far
- 014 Society of American Florists: imports of nursery stock including geraniums and
Ralstonia concerns. domestic producers are concerned with new diseases
coming into the US. new products with new pests.
American Seed Trade Association: wanting to know how these proposed
changes would affect seed imports and restrict imports. concerned that policies
might be too restrictive and overlap into seeds.
Summer associate with CA garden centers: learning capacity
Seed co.: sell woody plant seeds (imports and exports) in the US over 1000
species. not sure of the mix of domestic and imported seeds, but this PR could
impact his business depending on how the regs go. a smaller value crop and
wants his interests represented. Doesn't want seeds to be lumped with plants.
Environmentalist: wants to develop a rapid response and early detection of
invasive species in the woods from incoming plant material.
- 015 concern that we're doing this when the ANPR is still open for comment. How
does all this fit together? Impossible to tell if/how this all fits together at this time.
This group may not be representative of the total concerns.
This should be factored into how APHIS treats the options.
- 016 Plant health issues in both directions - facilitate trade and exports to Europe -
science-based process is very important
- 017 Worried about forests that we think are important
- 018 These are complex issues with no simple answers
- 019 Q-37 was not designed to protect invasive species.
- 020 concern that the meeting has already deleted option 1 - how did this happen?
lots of opinions in option 1 seem to have been ignored
- 021 the ANPR implied all was on the table, but we're not discussing everything
- 022 third, fourth and blended options seem to be ignored
- 023 at some point, the agency needs to decide

APHIS Group Comments:

- 001 to learn!
- 002 Driving motivation- fruit: Director of Permits, registrations and imports, which includes the Q-37 Team
- Senior regional program manager for Western Region
- Works in Riverdale for Policy Program and Development- performs Environmental Analysis for FIFRA and NEPA and ESA- here to track possibility for future involvement
- Current Port Director in Hawaii
- State Plant Health Director for MD and Washington DC- Personal Interest since worked at JFK PIS
- 003 observing - from international perspective
- 004 observing & learning
- 005 Facilitator on Temporary Assignment with PIM as trade director for China- belongs on QPAS
- 006 observing & learning
- 007 observing from the pest id perspective
- 008 Eastern Region. Duties as assigned, and personal interest in the revision. What info can be provided in the import process to inform PPQ decisions. Concern for defects in the current PPQ documentation process. Automated targeting system needs improvement. Tariff codes do not accurately reflect current situation.
- EU concerns from both APHIS and EU sides. EU keenly interested in this process.

APHIS staff presented a quick overview of the regulatory process, including a flowchart with brief explanation of each step and where the Q-37 revision is in the process, followed by a presentation on the background of Q-37, i.e. what is Q-37, why it is important, what has happened, what is happening now, what will happen, and target dates for future developments.

Background on Q-37 – Questions

What Questions do you have about the background on Q-37 you just heard about?

Stakeholder Group Comments:

- 001 What happened to option 1 from ANPR?
- 002 Where is APHIS in the process of categorizing and evaluating comments received on the ANPR?
- 003 Beyond the concept being discussed here today, are there any other early priorities emerging for the agency from the ANPR and comment process?
- 004 Is EVERY shipment of plants for planting inspected, or just a fraction? What sorts of plant imports are not inspected?
- 005 Will there be a difference in requirements for tissue culture, which are lower risk?
Should there be some evaluation of how tissue culture is done to determine this?
Is the proposal to consider only identified pathogens, given that we lack understanding of other lesser understood pathogens, especially pathogens of newer ornamental species8*? Are we restricting ourselves to pathogens that have been identified as infective agents already?
- 006 Please describe whether revised Q-37 will cover freshwater and marine plants and algae imported for ornamental or aquarium use?
- 007 Please describe how Q-37 will apply to US trusts and territories in 2 ways:
 - 1. Will risks to US trusts and territories be considered as risks to the US as risk evaluation is undertaken?
 - 2. Will exported plants from trusts and territories be evaluated and regulated as if they were from a foreign country
- 008 What is the difference between a pest risk assessment and a pest risk evaluation? What steps are involved in each? How long does each typically take?
- 009 To develop new category, don't you need to evaluate all taxa that have not entered as a starting point before targeting taxa that pose a risk?
- 010 There may be other options to form a new category, not just the two presented
- 011 We need some additional Clarification on the original regulatory philosophy behind Q37 and Q56. Plants for planting pose an obvious higher risk for importation of plant pests and pest plants than fruits and vegetables for consumption. So why did they put such serious restrictions on the importation of fruits and vegetables (for consumption), and put almost no restrictions on the importation of plants for planting???
- 012 How does the proposed option differ from the current approach?? (Other than the fact that APHIS will be regulating ALL types of plants).

- 013 We need some clarification around option 2.
- 014 Will genetically modified plants fit into this?
- 015 How will you discriminate among countries that have developed Plant Protection organizations as opposed to those that don't?
- 016 Are GMO's to be included in the PRA - in the new category?
- 017 What opportunities exist for the US to lead the IPPC to strengthen protection from pests in plants for planting worldwide?
- 018 The fairly recent regulations for GMO's are tougher than for -current - plants for planting. Have you compared them - like you did for Q54?

Questions for Clarification

What questions do you have about what you just heard?

Group Comments:

- 001 Why are "effective" and "protective" not first on the list of components of successful criteria? These components should be specified and added.
- 002 Can't APHIS use the proposed criteria already in place to prohibit imports prior to a PRA? How is this proposal different from the current system?
- 003 There are missing and incomplete definitions. When can we discuss those?
- 004
 - 1. Discussion Point: The structure of the B criteria is backwards. Should get a handle on the pathway before going into individual pest evaluations. Maybe treat different categories (tissue culture vs. cuttings vs. rooted plants). It shouldn't be difficult for APHIS to look at plant categories.
 - 2. Scientifically sound non-PRA evidence sounds like an oxymoron. Please explain how these are not in conflict? You've got to take a critical view before making decisions.
- 005 There are species that could be put into the new category because they are a host, but not 'readily' a host. Being a host is a matter of degree - a spectrum.
 What level of protection is APHIS trying to achieve? If you don't know what your goal is, how do you apply criteria? It should be described.
- 006 It sounds like this list is just going to make the PRA backlog worse. So how does this differ?
- 007 Clarify.... when a species is proposed for importation, the proposed system will require a PRA for species that have some documented history of invasiveness. What will happen to a new species that has NO known history of invasiveness?? Based on the discussion so far, it appears that 'unknowns' would continue to be imported under the proposed system, without the requirement for a PRA (unless otherwise regulated under other rules).

- 008 If something is in the "not authorized pending RA" list, then will it take more rulemaking to put it into the other categories?

APHIS staff presented an overview of the draft criteria for placing a propagative plant on the proposed new category of plants for planting - plants that are excluded pending risk analysis and approval. This session included a high level explanation and flow chart; the purpose of the proposed criteria, how & when the proposed criteria would be applied, and examples of how the process would work. A second presenter discussed specific data sources that PPQ could use that would trigger PPQ to apply the proposed criteria to specific plants for growing and the scientific validity of the data sources.

First Discussion Period

What additions or changes would you suggest?

Stakeholder Themes:

Additions or Changes

- First sources for scientific evidence would include all available existing risk assessments
- International Organizations (including non-English speaking) records or lists of plants, pests, or plants as weeds.
- Sound State weed lists
- ICTV (Int. Committee Taxonomy of viruses)
- Standards should be the same for both Plants as Pests and Plants as Hosts lists
- Create standards/protocol needed as how to handle personal observations, diverging opinions on their value/appropriateness.

Reactions/Comments:

- In general the lists look good except for personal observations
- All sources should be verified by competent professional before taxa are considered for NAPRE
- Concern that we're "jumping the gun". That we're putting the cart before the horse in requesting input on specific data sources before we've even agreed upon a process for revising Q-37 or even whether it should be revised.

Stakeholder Participants entered these comments

- 001 if the commodity/pest is listed in a number of sources, then we would consider it. It would be difficult to give this a number without 1st beginning your search.
- The number of times is a concern, but it should not be an overriding factor.
- If it does show up in multiple sources, then it would be an indication that it is a risk.
- If an invasive sp. shows up in the US and we're considering it, we should check the resources. ie. Beach vitex
- There needs to be a combination of sources that are reputable to weigh in and consider the validity of the sources.
- soybean rust example: foreign country sources, industry, scientists, scouts in the field, how do you bring industry in confidentially. They want to share info.
- APHIS needs to make the decision to put it in the new category NAPRE.
- Just because a plant is on the list, doesn't make it significant.
- What if you create 2 different sources that are ranked in importance?
- Personal observations need to be backed up...sources checked.
- If a new fern from S. Africa wants to be imported, check the list and see if its on it. If it is, then send it through this process.
- The list is complete, but it's important to consider plants as pests AND pests of plants.
- No additions or changes.
- 002 Is the same level of scientific information needed to enter AND exist the NAPRE list?
- If getting off is harder, then who sets that level?
- Will the getting off still require rulemaking?
- PRE v. PRA is still confusing with respect to timing
- ADD FOREIGN LANGUAGE REPORTS!!!!
- Countries level of information is critical for whether their data is any good
- EPPO and NAPPO / IPPC in general need to be captured for all sources - both categories
- First sources are good, and need capture but need a way to verify
- Degree of harm needs to be captured too if ALL sources are good
- If trigger is evidence of harm, then key is to capture this, so ALL listed sources are OK
- Harm needs to be defined as well as the acceptable level of risk
- Every problem we've had, we haven't known prior to entry, so this isn't going to help

- 003 First impression emails, bloggers should be given less weight, need to be verified. Use them to do further research, to confirm, but don't use by itself.
- Look at background of individual involved, qualifications. Agency obligated to follow up...on these reports, must verify. Ranking should be used. A PhD should be an indication of legitimacy. Number of primary observations should have some weight
- Agency could be overwhelmed with personal observations. Should there be follow-up automatically? Agency obligated to rank inputs, follow up on highest ranking.
- Personal observation should require a confirming second source. Source of info may be in a part of world lacking academia...still important. Experts in field without PhD may have more knowledge than the PhD.
- If serious, there will likely be more than one report.
- Notices to Secretariats if important. International responsibility to report diseases & pests.
- Submissions to International Plant Protection organizations, and these fora should be considered.
- IPPO's lists are very valuable. States in the US. PPO's good sources of info. What are non-quar. pests for them could be quar. pests for us. Information from sources of exports very important. Should be a clear link between the host and quar. pests identified.
- Lists of hosts and associated pests should be updated, more compiled...e.g. Amer Phytolpatholog. Soc. should do more.
- Funding is needed to characterize the host/pest relationships, develop.
- Should be a database where you can enter host or pest and get the associated pests or hosts. APHIS should hire someone to do this.
- Should have a definition of what a Professional Soc. is....need criteria to evaluate them. Exotic Plant Councils are putting out extreme lists. Maybe should not be considered professional societies.
- ICTV updated recently "International Comm. of Taxonomy of Viruses" is a good source of info.
- 004 Look at all the Commodity Risk Assessments (for F&V) as a source of pest information to start Risk Evaluations for plants.
- Some pests that don't travel with the fruit or veg may travel with the plant.
- Would the PRA still be applicable if they are old?
- We are not updating PRA's over the years even though international trade may have changed the pest status in a particular country or pathway
- Another data source could be trade journals, trade assoc. reports. Could pick something up early.
- Trade journals could be biased. Everything should be investigated rigorously.
- First reports should be substantiated.

Sometimes first reports are important, need to be investigated, but shouldn't be discounted

Further research needs to be done

Would Listservs be a credible source?

There should be a way to judge one country's papers over another

Personal observations should be considered for insects, diseases, etc., not just weeds.

First reports should be considered, like APS reports of a first time a disease is reported in a new country

First reports by two weed scientists should be a trigger for APHIS to take action

What if there are no data sources on the plant or from the plant's origin? Does it go the new category never to escape?

If no data, no information, then it does not go into the new category, even though it could be a risk

Will APHIS adopt a finite timeline that a plant for planting languishes in the new category? Is it months? years? What is the case?

Can the importer do a PRA and submit to APHIS? Yes.

005 Addition - Scientifically sound State weed lists should be a suitable source of information.

WSSA technical point - That information source needs to be stated more clearly regarding what it refers to as not everybody knows what it's about

If the species earns a score of 5 points or higher on the WSSA scale doesn't make sense as a criterion - every species in the WSSA meets the criterion of having been documented as invasive or weedy elsewhere, regardless of scores - use the entire list

Wherever the source comes from, how do you define sound science? I'd have a concern if the source was personal observation. In and of itself, personal observation may not be credible. All sources should be verified by competent professionals before taxa are considered for NAPRE.

"Sound science" is too arbitrary. What is perceived as sound varies with the person who is looking at it. Uncomfortable with subjectivity. List is very subjective as it stands now. We're being asked to buy off on something that (1) is subjective, (2) that decisions that are going to impact industry are going to be made on this. Uncomfortable, bordering on arbitrary. Not sure what standard to use.

We're being asked to help you finesse a list where we haven't bought off on the concept, and I find that very offensive. So it comes across as disingenuous that our input is valued and really being sought. Perhaps not the intent, but we haven't decided that this is the best strategy. In this case, we're talking about a taxon, we don't know if it's something that's been coming in historically, something that's not coming in, something that's been coming in but from another location.

We need to keep in mind that this is different from traditional regulation of the kind we're used to . This exercise is in the context of deciding what information indicates that we need to do a detailed scientific analysis. I'm willing to accept the premise...

I work for a company - this is our livelihood to bring in new plant material, and this all looks reasonable to me. But as a plant scientist, I would prefer research that appears in a peer-reviewed journal. But if we have a lengthy process, that slows up product development and introduction. There has to be reasonableness. We have to gather all the best information possible. Who makes the final decision? I don't want this slowed down so much that it's analysis paralysis. A second-grader might find something new by the time they make this decision and we might have to reset the process again.

Most of these resources are pretty straightforward lists of weeds. If I'm an industry person and I know that if I want to import this, would I look for plants that are not listed as weeds? (Yes.)

If I bring something in that's not on the lists, it might still be invasive. How would we know if something wasn't listed and was invasive?

Personal observation is way too subjective. What is reputable? It shouldn't be a criterion.

Everything that's listed makes sense, except personal observation.

Personal observation will trigger additional research. It should be used as a trigger for investigation whose results could then feed into APHIS action.

What standard of scientific credibility should these data sources meet?

Themes

- Set-up or find a criteria for what constitutes valid, quality scientific data; e.g. criteria in the Data Quality Act.
- Use peer review standards to establish credibility.
- Sound science is in the eye of the beholder, what is perceived as sound science depends on who's looking at it.
- What ever standard of credibility we have should be transparent
- Evidence such as government reports, peer reviewed research, and other risk assessments have a good level of confidence, include foreign language sources, while observations and possibly even trade journals are less valuable (?) they need adequate investigation

Stakeholder Participants entered these comments

- 001 Except for personal reports, all of these sources are credible. Peer review is probably needed.
- APHIS needs to ascertain the credibility of personal resources.
- At a minimum, peer review needs to provide credibility to a personal report.
- Alert systems are reliable.
- International references are credible.
- 002 The further you go from govt material the further you go away from what APHIS can use - diluting the information with less scientific material means you get more false positives
- Need a balance timely v. waiting for the best information
- Burden on the importer can't be unreasonable
- At some stages, industry information could be added as a data source
- Ideal world idea, but can this happen within an agency?
- Reducing the threshold for getting plants in means more risk - would we let the importer be the source of information? Sounds good . . . does this lead to agency capture? Importers balk at being forced to provide information
- Pitifully limited cash needs to be factored in -
- the list seems rational, but at some point APHIS needs to decide what they have the \$ to look at
- Standard for plants also needs to be same as for pests of plants
- We don't want to miss something new and get problems while we wait for more science
- Flag of "harm" needs to be similar for both
- Are you going to have to choose?
- Decision to go for in-depth information may rely on the fresher information
- Two stages - what are new risks - rather than waiting for an import request - this no need a lot of in-depth stuff. Then there's the next regulatory step which needs lots of information that's sound science
- 003 Consider Data Quality Act criteria, provisions.
- 004 Needs to be a system to check on reports. There is a lot of bad information out there.
- Don't think plants should be put into new category based on personal observation
- Can't be just one person's observation out of the blue.
- Two weed scientists observation may not be a valid source of data.
- 005 Competent peer review is the term I hear, and that's something that as a policy person I buy into. But I don't have much idea what it is.

Competent peer review is entirely appropriate and a widely accepted threshold, although it can mean different things to different people.

PPA doesn't include much environmental protection issues, but APHIS seems to be embracing it. Data sources should not be oriented just toward commodity production in agriculture. Data sources should come from non-conventional sources of data. You could check citations using the Web to see every article that mentioned "invasive." I get e-mails telling me that there were 53 articles in the last quarter that mentioned invasive species - maybe people at APHIS could use that as a trigger. Conservation biology is one source that could be used. Check conservation journals. Nature Conservancy would be a source of information, because they keep track of impacts on lands they own, and perhaps because they're non-Federal they would be perceived as neutral.

Forestry pests become nursery pests.

Worried about tendency to regulate biovars. Want to know how that is credibly determined - if you're going to start regulating pests below the species level, how are you going to have scientific credibility? Makes me nervous to get down to that level of specificity. On the other hand, we sometimes have to specify.

We are regulating at subspecies level, without having asked the question. The issue of regulating DNA also comes up.

In our industry, we go to mutation breeding and to developing inter-specific hybrids for embryo recovery. Some are not reproduced by true seed but cuttings.

We live in an Internet world. Not every good piece of scientific information is in a PR journal. If there's pretty clear evidence from a bunch of experts on a reputable listserv, I think that ought to be an acceptable standard.

No, I think that should be a trigger.

If the people are all credible, and it's all personal communication, is that good enough? (Table response: No.)

You could put on a symposium on whether to consider expert opinion.

Tension between expert opinion facilitating more rapid action, controlling a problem quickly - on the other hand, PR scientific journals, takes forever to get published, poorly developed infrastructure. I can see value in expert opinion helping to drive the decision-making process but it's fraught with risk, too.

I don't know which listservs would be more credible than other ones. There's listservs and there's listservs. Scientists know more about what's credible. But there is lots of good info on invasives. Who's communicating, what their credibility is, what the follow-up is. It can serve as a trigger for investigation.

We have to take into consideration the SPS agreement obligations - sources have to be readily available to our trading partners.

Transparency should be a huge part of whatever APHIS does, not just saying "We're going to do this" but providing links and informing the world of exactly what sources are considered to be credible. APHIS can be a good model for transparency.

*APHIS staff presented an overview of basic plant classification, what non-vascular plants are, and PPQ's current policy for regulating non-vascular plants. Currently, APHIS regulates only one non-vascular plant, the Mediterranean strain of *Caulerpa taxifolia*, which is listed as a Federal noxious weed.*

Should certain non-vascular plants for planting be included in this proposed regulatory process and therefore be regulated like nursery stock? If so, which ones?

Themes:

- The distinction between vascular & non-vascular isn't important, weediness, pest status is.
- Broaden plants to include brown & red algae, lichens, fungi (mushrooms), and other non-vascular plants. APHIS has the responsibility to protect plant resources and should regulate these.
- Plants moving in aquarium and water garden trade should be included
- Many non-vascular plants are of no economic significance. APHIS may not be resourced to handle them. More info. on non-vascular plants as "pest potential" is needed. Consult experts, check on APHIS statutory authority to regulate this group.

Stakeholder Participants entered these comments

001 What about brown and red algae?

lichens

Other NPPOs not able to certify? If on the NAPRE list, then it would be a stop, so why would these countries have a problem?

Monaco's denial of *Caulerpa* issue shows why APHIS needs to get into this area

Huge difference between lack of evidence of harm and lack of harm

If it takes 50 years to revise regs, then take advantage of this process at this time
- lack of evidence is NOT the same as lack of harm - if APHIS no know of extent of imports then need more info - especially of harm to env - so I'd hate to say omit b/c of lack of evidence yet

By extending into lower plants are you showing leadership or are you violating IPPC limits

Are the other classes treated under the IPPC?

Conceptually, not a problem - but dilution of APHIS resources is the real issue - lots of other problems exist

Increase in water gardening is driving this issue

Excluding until there's a problem - isn't an option

Evidence of harm isn't disregarded but if citizen groups needed to petition to add then something's wrong

Caulerpa is an indication of problems - no reason to not include all the lower plants - Europe didn't realize there was a problem until it was way too late

Calif now spent \$\$\$\$ to eradicate, so public needs to stop paying for eradication efforts

There's no way to ID the strains, so APHIS rules are too narrow b/c they pretend that the MEditt strain can be id'd

We don't know if there's a problem with these classes, so why want to include?

Caulerpa - strong advocate to include these nonvascular b/c it is a large regulatory gap for APHIS

We want the ability to regulate - should there be a problem

002 Statutory Authority should be explored, ask for clarification.

Should conduct some preliminary research into whether the nonvascular plants pose a potential problem before we include them.

Aquatics may be dumped from aquaria into waterways and pose a risk as invasive species.

Vascular plants should not be ignored, but we need more information. Need to gather more info before deciding.

Talk to experts in these groups to gather more info. If being used as substrate for other plants, they definitely need to be looked at.

Plants used in aquaria should be evaluated.

Consider lichens because they contain green algae, if we regulate green algae, we should also consider lichens. What about fungi, mushrooms?

Exotic mollusks may enter on nonvascular plants. From a protection angle, we like to see everything go through some kind of filter.

For nonvascular, some sort of risk evaluation is desirable.

Resources should be a key consideration. Why a preliminary analysis would be a good idea to see if resources should be spent this way. We should collect data on these types to see if any are being entered.

Need to further specify the categories of info collected by CBP.

Exotic nonvascular plants may be imported on stone shipments.

Most people think we probably should reg. nonvascular, but we need more more information first. Need to research the risk before deciding. Look at aquarium plant trade.

003 We need regulations on Caulerpa species to the genus.

Potential problems could occur with these two groups, but this distinction (vascular vs. non-vascular) may not be a criteria for invasive species.

It is important to keep the distinction again of plants as a pest and pests on plants.

Consider invasiveness of these groups; as a host for pests, we don't know.

No liverworts!

We should at least give it 4 hours of research on the internet for these groups.

There are not many pests of mosses, but we still should control this group for both pathways.

Cannot put all of these issues on APHIS due to a lack of resources.

Maybe the companies that want to import these plants could do the assessment before importing. Anyone who wants to get something on a list needs to get the documentation to put it on the list.

But then again, we cannot just rely on foreign sources for assessments.

004 Probably should be regulated. Why should they be treated differently? Hydrilla is a problem.

Caulerpa is a current problem, some types are highly damaging. Taking over the Mediterranean and parts of CA

APHIS has the responsibility to protect plant resources and should regulate these.

It may be a cost-benefit issue. None of these plants are economic. APHIS may not have the resources - manpower.

Can't get data on these non-vascular plants unless they are regulated

Should be examined in the port

The word significant is a very scary term. Commercially significant should be used.

No opinion - no comment on it.

Would non-vascular plants be regulated as pests?

Would APHIS have to regulate boats - bilge water?

APHIS may decide to regulate to deliberate importations non-vascular and leave ballast water to other agencies

We are spending millions to eradicate non-vascular plant introduction in CA

If APHIS doesn't want to take on this job, they may lose that job of protecting the US because the job needs to be done

005 Not passing judgment on whether we should or should not regulated, however in the context of Q-37, are these plants for planting? Because if they're not, then they don't fit into this discussion. Some could, though.

People would be upset by accidental introductions of some non-vascular plant along with a regular plant.

I think APHIS should be regulating some non-vascular plants as plant pests.

Fungi and brown and red algae should be included in the discussion.

Are mushrooms imported as plants for planting?

I would think fungi should be regulated because they will come up as a plant pest. They might be regulated as imported plants as well. I don't know if that's been a problem in the past, though.

Do non-vascular plants qualify as members of the plant kingdom?

We're talking about plants for planting - if it's not a plant for planting, it shouldn't be part of the discussion.

APHIS can regulate it as a plant pest, but it's beyond the scope of Q-37.

I think green algae that are imported for ornamental use are plants for planting. It would be consistent for APHIS to regulate what are considered noxious weeds as plants for planting.

Marine algae are a terrible problem. Caulerpa - 70 species in the genus, most are invasive somewhere around the world.

People bring algae into Hawaii to serve as medium for various plants. Some of the algae have gotten away and gone into the wild. Packing material.

People dump their aquariums into a pond, Caulerpa invades.

Plants brought in for ornamental purposes should be covered in Q-37. Accidental introductions accompanying some other product should not be covered. (General consensus at table.)

APHIS staff presented a quick overview of the 3 proposed criteria for component A of the new category. These criteria apply to plants that may themselves be quarantine pests. Real-life examples were given for how the criteria could be applied.

Second Discussion Period

What do you like about the 3 proposed criteria? Or, what do you see as the pros for the proposed criteria?

Themes:

- We like the criteria approach

Stakeholder Participants entered these comments

001 Brownies were great.

Like the sequential steps. Easy to follow.

Covers the essential elements that need to be looked at.'

- Fast screen. Proactive. A way of screening admissible plants.
- 002 Like that there ARE criteria and that it has to be documented - despite the debate on the level of documentation
- Like the documentation - more transparency needed
- Really like the addition of plants as pests - it's about time
- damage potential is part of criteria is vip
- 003 Follows the international def. of a q pest and we're not creating anything new.
- Can look at an entire genus.
- 004 Like the fact that the criteria are here. It's important that APHIS is looking at these and using them.
- I like relying on whether it is invasive elsewhere.
- I don't think you can use the criteria in isolation
- I like them - no problem with them
- I am satisfied with them.
- 005 I like that APHIS is putting this out there. This is a major policy improvement.
- Under A3.b, and "under or being considered for official control" is a welcome expansion.
- Makes logical sense to me.
- Fairly simple, seems to be in line with what APHIS's authorities are.

What don't you like about the 3 proposed criteria? Or, what do you see as the cons of the proposed criteria?

Themes:

- Isn't clear whether the process stops if taxonomic information is incomplete or in question.
- Needs to clarify that identification is paramount. Difficult to regulate something you can't identify
- The definition of weediness, invasiveness, and origin needs to be clarified
- All criteria need to include definition of terms.

Stakeholder Participants entered these comments

- 001 Many plants that have become invasive were not weedy elsewhere. We need to incorporate a model to predict invasiveness to catch those as well.

If they met the criteria , why not just prohibit them?

Not clear what will be put into the grinder. Concern that it may be too restrictive.

002 Geographic reg requirements relation to regional concerns

If folding fed noxious weed regs into this, then how affect the movement

Kudzu into Montana could be a problem, so how could the regional harm be captured?

If a pest is established at the tip of Fla, then could it make the list?

A 1 day workshop is not the thoughtful way to change regulatory language - process doesn't match intent

Increasing biodiversity of plants already present - show some leadership to address this area of concern

documentation of weediness isn't the be all - no way to account for lack of information - particularly as env. changes

Order of the criteria should be the same for both categories . . . most missing is a criteria for things that haven't already shown their weediness, but it exists

weedy is not same as invasive

Cultivar variability - to the point where id is problem - is a MAJOR issue.

If the species isn't going on the list, then is it enough to get seed stopped or will the trade continue?

Would the technically unacceptable seed be stopped? This could stop trade affiliated to i.e. aff or cf = compared to not "f" as typed before - sorry!

In the ID accurately estab'd, in seeds - especially in fields - when no see the flowers - they come in as f or cf - how would the unknowns be treated?

Capturing the interstate movement is difficult

003 non-native, not established does not follow international standards.

A-1 a needs a statement "in the US" or "in the US or elsewhere."

Criteria 2 should be number 1; and number 1 should be number 2.

004 Don't like that the criteria are not defined

Definition of weediness is too broad. Who will define this? Will it be industry, environmental groups, APHIS?

Standards are difficult to create. Would have to be based on local or regional environmental effects

Regulating a weed at the genus level may negatively affect specific sterile selections or non-invasive

In criterion A1, you can act only if species is documented as weedy elsewhere, and not relying on predictive models, including the one developed for APHIS by

Dr. Parker. There should be a C under that stating that it is identified through one of the screening processes recognized by APHIS.

The question of weediness elsewhere is difficult to determine. To call that an adequate criterion is weak. It should be a contributing factor - not the only factor.

The word "noxious" can be misunderstood.

Concerned about the word "native". Take a look at how this is being applied by APHIS.

- 005 Not clear enough whether the invasiveness must be demonstrated elsewhere, in addition to the weediness.

A2 is so fundamental that it should really be A1 - taxonomy should be firmed up before you do anything. Strong immediate agreement from four other people.

If there's any controversy around its identity, does that mean the taxon will never be considered? Hybrids could be moved through because they won't be readily identifiable.

Nomenclature shouldn't be a decision-tree question, where if you know it you continue and if you don't you stop.

New standard: "If you can't tell the invasive species from the noninvasive cousin, you have to regulate both." Otherwise, inspectors can't tell.

Genus and species name should definitely be included on the phyto.

I don't see how you can do the damage potential without knowing what the identity is.

Suppose I breed a native plant within the same genus and species to get better characteristics, and it the hybrid becomes weedy. What does non-native mean? We should be able to hammer a species that's our species if it varies in places or within hybrids, etc.

Potential for weediness needs to be considered as part of the criteria for entry into the U.S. If its under official control, though, a decision has already been made as to whether it's a weed. Being under official control doesn't really belong here. Being under official control would be redundant.

A3B should be read as a limitation regarding what can be considered quarantine pests under the IPPC. In order for you to regulate something, it has to be controlled or considered.

Question with regard to legality of official control: If it's under official control and considered a weed, that's one thing. It's not really clear here how we're relating noxious weeds and plants for planting.

We've got all this terminology being thrown around, where the agency's authorities are associated with quarantine pests and noxious weeds. Criteria in A1 needs to be reworded in terms of potential to cause harm or be a quarantine pest or noxious weed. Go back to the PPA language.

I'm not sure whether plants that are pests are quarantine pests or noxious weeds, given this discussion.

There's a need to look at what the statutory authority is - just because this is a good idea doesn't mean we can do it. Or maybe the authority does exist but it exists with regard to noxious weeds.

The idea was to elevate noxious weeds into plant pests so that you could deal with them as plant pests. It seems to me that they're going to have to redo the noxious weed regulations in accordance with the nursery stock.

What changes or additions would you make to the three criteria?

Themes:

- Something that's invasive in one part of the country may not be in another. Many QP's have ecological limits (limited distribution) e.g. plants in Hawaii may not be invasive in Maryland
- The system must be based on evidence of harm not on a basis of proving no chance for harm.
- Use ecological ranges to determine whether regulations appropriate/effective
- Seek counsel from international standards and treaties and clarify and tailor for US applicability.
- APHIS needs to address the issue of latent/delayed invasiveness

Stakeholder Participants entered these comments

- 001 A2- do not want to see anything below the species level. Nightmare. But other disagree. Model Norm Elstrand has published on topic of some species can sit for a number of years before a problem is noticed, but after several vars. or forms are imported, they together cause problems. But very hard to predict.

Ecological differences should be taken into account. Something invasive in FL may not be a problem in Northern States.

A3 Use of "nonnative" common mistake to equate invasive species with nonnative spp. Ex. Spartina where native sp. can be invasive in other parts of the country.

Use models to predict invasiveness, but validate the models first.

Consider Ecological zones , regional differences.

- 002 APHIS needs to coordinate with the states to involve them in the "official control" official control needs state input and APHIS needs to recognize their measures Caulerpa and SNAILS made the harm worse for Europe voting is so inconsequential at this time
Need a criterion that it may be plausible to become weedy here

voting is bad because not all America is here

Plausible harm needs modeling/reliance on other countries data/regional impacts

Negotiated rulemaking may be necessary to achieve the balance that's needed

Can't ignore the state controls

Time frame consistent with state needs

Scope of the criteria needs to add potential/plausible damage not yet seen and the other area is plant imports might have different invasiveness than the domestically present areas - make b same as a

BY the time a decision is made or the need identified, it may be too late to establish an official control

Need another criterion for geographic info here too

We need to go back to the website and make more comments now

Whether or not to vote is an issue that this group should vote on before doing any voting

003 Non-native is not defined.

Criteria 2 needs to flip flop with criteria 1

PPA authority does not extend beyond noxious weeds.

The PPA is not about the environment, but agricultural commodities are considered.

004 APHIS NEEDS to define what does 'established' mean. If it is in cultivation, according to current thinking, APHIS would not consider regulating it because of the definition of "quarantine pest"

Adding another category - Established Plants - to evaluate plants in cultivation that have escaped and become invasive. APHIS could then regulate international imports. There would be good reasons to regulate the further import of invasive plants even if they are already established.

In criterion A1, you can act only if species is documented as weedy elsewhere, and not relying on predictive models, including the one developed for APHIS by Dr. Parker. There should be a C under that stating that it is identified through one of the screening processes recognized by APHIS.

005 AIA - poorly written. Should be an adequate indicator if it's been documented as invasive or weedy within the United States. There are plenty of species that are not weedy in their native habitat but that become weedy here. Should be within the US or elsewhere.

Also want to add "or otherwise documented as likely to be invasive or weedy within the United States." As currently worded, it's reactive. We could use modern science that helps us to predict weediness of species for which we don't have all the info. Other countries use this info. I would like to see language that indicates that if sound science predicts weediness, we can regulate it. Make this A1C.

Some reluctance from rest of the table about "likely."

There have been a lot of predictive models that are increasingly becoming very useful. In terms of "likely," maybe "has been predicted to be". Likelihood should be predicted by scientifically sound models rather than just opinion.

"Document or predicted to be invasive or weedy here or elsewhere."

A3B - unclear what is the situation with plants that have been sold and that are in nurseries or gardens but have not been invasive yet. Then get data indicating that it's likely to be invasive. Is this species established or not? I don't think it's established.

I'm inclined to say, yeah, it's established. I could see a distinction between a plant that's only in production but hasn't gotten out into the marketplace, though.

I think the intent of the IPPC definition is to focus on the area of concern: Is the plant established in the fields or not? Gardens are not the same as establishment in the wild.

But if it's planted in 30 states, and we suddenly have reason to think it might become invasive, how do you eradicate it?

Does that mean you just give up?

It's beyond consideration as a quarantine pest.

But maybe what you want to zero in on is how to prevent that from happening. purple loosestrife

I don't care how widespread it is, it's still as bad as you can get!

You could decide to pass local ordinances that require its control and eradication. But you can't regulate it as a Federal noxious weed.

So you can't keep it from even being moved around the country. And therefore under a certain set of Federal authorities you can't take actions.

does limited distribution mean in one State or only in gardens in 10 states? The area in gardens in 10 states is miniscule compared to the area of one State.

Explain what we mean by present, established, and widely distributed. IPPC definitions are not clear enough.

In CITES treaty, we allowed for stricter measures.

IPPC says you can only regulate quarantine pests. APHIS authority devolves from that.

the system must be based on a evidence of harm not on a basis of proving no chance for harm.

APHIS staff presented a quick overview of the 4 proposed criteria for component B of the new category. These criteria apply to plants that may be hosts of quarantine pests. Real-life examples were given for how the criteria could be applied.

Third Discussion Period

What do you like about the 4 proposed criteria? Or what do you see as the pros for the proposed criteria?

Themes

- Generally like the criteria

Stakeholder Participants entered these comments

- 001 Default of genus is good - *P. ramorum* regs differ and this is bad - variety level is ridiculous
Pathogens differ in level of specificity, so default of larger unit makes sense
Geographic differences vip and good
If Potential harm to alternate hosts is part of this, then the damage potential is reasonable
- 002 Identity is accurately established before any other action is taken.
It seems to be valid, generally speaking.
Generally, we should go to species in terms of pest identification.
Bias in determining hosts should be towards field hosts. Pure lab hosts should not be regulated!
- 003 taking economic damage into consideration
focus on the pest and NOT the plant as a pest
moves us away from relying on inspection
consideration of the country of origin
- 004 Like the sequential criteria. Good general framework on which to hang tweakings. Appropriate criteria.
Like the diet ginger ale. Want wine next time
- 005 Like that there is the "process". I like that in Ed's example, that APHIS picked up on something fast (*P. kernoviae*).

What don't you like about the 3 proposed criteria? Or, what do you see as the cons of the proposed criteria?

Themes:

- Many pathogens are not serious in the area of origin, but many find different hosts in the US that are more susceptible. APHIS must account for this.
- Alternate host for pathogens need to be considered.
- Need to distinguish among the kinds of plant materials being shipped (tissue culture vs. seeds vs. whole plants).
- Default taxonomic unit for host plants [should] [should not] be genus

Stakeholder Participants entered these comments

- 001 Resistant varieties are a real problem if the default is genus
Need a threshold for what is the economic or other damage potential
Alternate hosts are also an issue -assuming that a host is a host - alternate or not needs addressing - very specifically
e.g. White pine blister rust - potential problem if the alternates have increased or decreased susceptibility
Receiving end of geographical issue - i.e. state by state choosing to receive should occur - is this subsumed within criteria 3?
- 002 Need to make sure there is agreement on identification method and testing to verify identification. Make sure the "pathogen" is actually pathogenic - follow standard protocol.
Should prohibitions be on all imports of genera, or just from some areas?
This section has blinders on it - triggering event is the identification of a potential quarantine pest - triggers response regarding whether hosts should be regulated. This is a pest-triggered analysis rather than a pathway-triggered analysis. What happens when China starts planting lots of nursery stock, of all kind of species, and not importing them in growing media? No one's done a pest risk analysis to see whether this poses a risk.
More advanced NPPOs that can detect more pests pose LESS of a risk, not more - info on Chinese pests (for example) may be spotty, and thus may not make it into this system.
Trade in other areas is important.

New sources should definitely be considered in terms of risk. New countries where we know nothing about what's going on - what do we do? (Table-wide concurrence.) Be more proactive, rather than reactive.

North America is very young, and Asia is very old - pathogens in Asia can kill us, even if we don't know about them. And yet Asia is the part of the world we know the least about. Africa is another example. We're most vulnerable in plants not in growing media. I'm not sure that the system is as responsive as it needs to be with regard to detecting new pest interception patterns along pathways. In Central America and Europe, there aren't that many surprises left.

- 003 The seed needs to be regulated separately from the plant.

Consider plants in growing media vs. bare rooted plants

The process of cleaning seed from different countries varies and should be taken into consideration as a mitigation measure

Typo: 3 should be 4 in this question

We are awake!

- 004 Many pathogens are not serious in the area of origin, but may find different hosts in the US that are more susceptible. Agency must account for this.

First issue should be likelihood of the plant being a host. Put #4 as Number 1. Works backward from the problem. Not a real life situation, where the plant should be the starting place. But you have to keep updating, keep looking for new info.

Need to state how protective we want to be. Err on the side of false positives when the pathogen is significant. Trade industries may feel differently, but we should err on the side of caution.

One race may affect one host more than another, so leery of starting with pest. Start with host.

Uncomfortable with the determination of pest status. Something can be harmless in its place of origin, but not here. Could test domestic hosts somewhere else.

Must realize the system can't catch everything. Impossible take, but want to catch as much as possible with resources available.

- 005 Need to start with the plant/taxa and what info we have that the taxa may be carrying

Need to distinguish among the kinds of plant materials being shipped (tissue culture vs. seeds vs. whole plants). Start looking at high risk categories first (whole plants), then look at genera or species.

The bigger the plant, the greater the issues to evaluate

Need better for definition for "economic" and "environmental harm".

When talking about what something may do in a "natural system", it may be hard to find data that will meet criteria requirements to push it into the NAPRE

What changes would you make to the existing criteria?

Themes:

- The NAPRE should link commodities and countries where pest is known to occur.
- Relationship between geographic origin and pest/pathogen should be considered.
- The criterion for damage potential should consider mitigation measures that are in place in the exporting country.
- It is not clear how the process will work? Specifically, do currently traded species get grandfathered? Do only species get off a list and onto another?
- Consider budget limitations. Start with plant parts most risky (as opposed to seeds or tissue culture).

Stakeholder Participants entered these comments

- 001 Can the NAPRE link commodities and countries where the pest is known to occur?
- These criteria don't deal with unknown pests.
- Selling to the US - by requiring big hoops - industry itself demands as well as buyer demanding clean stock.
- Pest by pest is bad enough, pest by country is way too far off the deep end. We need to return to radical change in the nursery production within this country to avoid the whole problem
- APHIS can't address the issue of nursery woes, but control of propagation material can be done. Let's just produce it here isn't an internationally acceptable way to go or is more efficient. Opportunity cost v. cost of control after pests enter.
- Not present in US - what if it was never looked for? This is not the same as not known to occur. Surveys to delimit?
- Wherever the experiment is done gets applied to all the world . . . ?
- Additional criterion of the geographic origin should be in the NAPRE . Simply because it's listed should not stop all trade
- More efficient examinations of risk - pathways - as opposed to pest by pest are needed to reduce \$\$ and time load
- Alternative to the term pathway? Pathways of seeds can be very very good
- Ensure that use of "economic harm" and damage are consistent and defined

- Why is level different in category A v. B? Rather have default be conservative
Treating US as one - as opposed to regional differences could be problematic
Make clear what "hosts" mean - same as in other country is WRONG. Need to use the full range of ALL hosts
- 002 Plant material exists on a continuum of risk => seed, tissue culture, cuttings w/o roots, cuttings w/roots, etc. This category should distinguish between forms. Separate consideration for different forms.
- Agency ought to be examining commercial volume from new sources - should channel into forms lower on the risk continuum or clean stock programs.
- Penjing was clearly political - political impact should not override science.
- Different restrictions for commercial quantities versus research quantities.
- Needs to be clarification regarding Departmental permits and bringing in material that could be a potential threat for research vs. commercial quantities.
- 003 B4 Some pests have very large host ranges and you don't know the entire spectrum. Do not want to overly restrict plants in the regulations and/or NAPRA lists.
- Definition of "timely-manner" needs to be defined
- 004 Mitigating measures that an exporting country can use are missing. Should look at mitigating measures that in place in the exporting country,
- Look at holistic approach, look at the pathway, is media involved? Host plant/mediqa /pest universe should be taken together, is it packed under lights, which would attract hitchhiking pests? Host plants do not exist in isolation, some mitigations must be in place. Incorporate systems approach.
- A lot of parking lot issues identified about how to take things off the list. A lot of interest in how will that work? Also, the clean stock issue. The more guarantees mitigations you can give the product abroad, the better. Must take into account the reputation of the Offshore plant pest organization. Incentives and disincentives necessary. Reward countries that are willing to spend the amount necessary to put something valuable into place.
- Concern that the agency may take on more than we can do with resources allotted.
- 005 A criterion should be linked to the geographic distribution of the pest.
- Sub species and biovar, etc., should be the control point. When sub-species acts like a species, APHIS should act at the lower level.
- Looking at on-going trade, we should look at the form first (evaluating tissue culture vs. seeds. vs. plants, etc.)
- Concerned what APHIS will do when it does not have answers to all of the questions about criteria. With lack of information, APHIS may not put something on the list that could be a real risk
- Seeds should be handled differently than other types of plant parts (such as plants with roots)

Considering the limitations on budgets there may be phases to the changes. Start with parts that are most risky (such as plants as opposed to tissue cultures and seeds).

Hard to look at criteria in isolation. Need to look at the entire system

Should not ignore laboratory inoculation information. Should possibly keep it in mind, or placed into another category

APHIS staff summarized the main points from the group's discussions & input made during the day. A discussion about next steps followed, then the meeting wrapped.